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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,419	12/12/2001	Martin Hague Ramsden	EN11348	5722

7590 06/23/2006

Motorola, Inc.
Law Department
8000 West Sunrise Boulevard - Room 1610
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EXAMINER

GRIER, LAURA A

ART UNIT PAPER NUMBER

2615

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015,419

Applicant(s)

RAMSDEN, MARTIN HAGUE

Examiner

Laura A. Grier

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-10 is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable Swanson, U. S. Patent No. 4164714.

Regarding claim 1, Swanson disclose a polyphase PDM amplifier which comprises and audio source (10), which indicates an audio signal; a modulator (16) – (the modulator includes comparators) that converts an audio signal in to a pulse train with a frequency that varies with a frequency of the audio signal (col. 10, lines 64-67 – col. 11, lines 1-29, figures 1, 2) coupled to a combiner (18), which includes amplifiers and reads on an amplification circuit. The enabling and disabling of an amplifier in response to a pulse train having a frequency above a predetermined threshold was well known. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Swanson by implementing a common function of the amplifier for the purpose of ensuring adequate function of the amplifier.

Regarding claim 2, and Swanson disclose everything claimed as applied above (see claim 1). Swanson discloses a logic (figure 7), which indicates a logic array, wherein it is inherent that

clock (160/240) is provided with a predetermined frequency as evident by the characteristics and make of logic circuits or means.

Regarding claim 3, Swanson discloses everything claimed as applied above (see claim 1). Swanson discloses a ripple counter included in a logic means (figure 7), as evident by the characteristics and make of logic circuits or means.

Claim 4-10 are allowed.

Response to Arguments

Applicant's arguments filed 4/24/06 have been fully considered but they are not persuasive.

The applicant argues that the prior art of record fails to disclosed the claimed invention in respect to the pulse frequency varying in respect to the frequency of the audio input signal for wireless communication devices, therein as claimed. The applicant indicates that the Swanson reference is directed to a relationship the input signal frequency and pulse width duration of a fixed frequency, unlike the claimed invention. However, the Swanson states that the pulse trains vary in amplitude and frequency in respect to the amplitude and frequency of the varying input signal (col. 11, lines 16-23), which reads on the claimed limitation in respect to the broadest interpretation of claim language. In regards to the invention not being known in wireless communication devices, and/or the reference not disclosing an audio detection circuit, the language of the wireless communication device and the audio detection circuit is only disclosed in the preamble of the claim. The claim language does not provide explicit indication for an audio detection circuit. Thus, the rejection of claims 1-3 is maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A. Grier whose telephone number is (571) 272-7518. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Laura A Grier
Primary Examiner
Art Unit 2615

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